

**To:** Goff, Bruce[bruce.goff@epa.state.oh.us]; Pepin, Rob[pepin.robert@epa.gov]; Jackson, Peter W.[jackson.peter@epa.gov]  
**Cc:** Nygaard, Eric[eric.nygaard@epa.state.oh.us]  
**From:** Pellegrini, Janet  
**Sent:** Tue 2/5/2013 10:49:30 PM  
**Subject:** Re: AEC/Bennoc Draft NPDES

Bruce,  
Thanks much, I forwarded to Rob Pepin (NPDES) and Pete Jackson (WQB) and included their emails herein for any future information.

Janet Pellegrini  
Environmental Scientist  
USEPA Region 5, Water Division, NPDES Branch  
77 West Jackson Blvd. #WN-16J  
Chicago, IL 60604-3590  
phone: (312) 886-4298  
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From: "Goff, Bruce" <bruce.goff@epa.state.oh.us>  
To: Janet Pellegrini/R5/USEPA/US@EPA,  
Cc: "Nygaard, Eric" <eric.nygaard@epa.state.oh.us>  
Date: 02/05/2013 04:03 PM  
Subject: AEC/Bennoc Draft NPDES

Janet and Eric:

Regarding the comment no.9 about when pond can discharge again during our call today.

I looked at some email and notes and the intent was to only allow the discharge once in a 7 day period, i.e. aquatic life only exposed to the higher TDS for no more than 48 hours once every 7 days. So if there was a discharge on day 1 and day 2, there could be no more discharges until day 8. If only discharge day 1, they could discharge again day 7.

Don't know if USEPA saw attached email where I explained to AEC "This is so the aquatic life is only exposed to the TDS in one 48 hr. period only once per 7 day period. "

I guess we could simply say don't discharge again until at least 6 days have passed

since the end of the last discharge to be more clear. The permit will need language to allow a discharge more frequently if there is a unusual precipitation event, which is that the draft does have.

Regarding comment no. 8. regarding PTI submittal. The NPDES P. does have a condition in Part II, item D. that AEC must submit a PTI to OEPA "prior to any installation/construction of any improvements to the treatment ponds". Not sure if everyone saw this.

Also not sure if USEPA says attached second email to the company. In this I explained that a PTI would be needed for changes to the ponds and also stated this:

During the call today we had a short discussion about pond liners. Note comment in the email:

"If the bottom area of the ponds will be enlarged during the modification of the ponds, please include a specification and details showing a good compaction using a good clay type soil so seepage will be minimized. If the ponds have seepage, the criteria to only discharge < 48 hrs, once a week would not be met."

Hope this helps.

I didn't get everyone's names on the call today, so please pass this on to anyone else who was on the call who may be interested.

Bruce

----- Message from "Goff, Bruce" <bruce.goff@epa.state.oh.us> on Thu, 18 Oct 2012 21:28:55 +0000 -----

**To:** "Scott, Crellin" <cscott@coalsource.com>

**cc:** "Nagel, Jon" <jnagel@coalsource.com>, "Nygaard, Eric" <eric.nygaard@epa.state.oh.us>

**Subject:** RE: Draft Bennoc NPDES P.

:

Crellin:

I've sent the draft NPDES on to public noticing. The final draft is attached. I believe it is the same at the last draft I sent you except for item D in Part II I changed that from "reserved" to:

*D. A Permit to Install ( PTI) application must be submitted to Ohio EPA before installation/construction of any improvements to the treatment ponds.*

The need to submit a PTI to us was discussed in other email communication.

I also did some minor changes to the footnote language for each outfall to make it more clear about what is meant by a 48 hr. discharge period once in a 7 day period.

Please refer to my last series of email at the end of September that explains many of the provisions of this permit. One has to review these to understand the basis/reason for many of the permit conditions. For example, we normally would have to include a 30 avg. limit for TDS of 1500 ppm for discharges to tributaries with no dilution. The initial small tributaries the ponds discharge into don't have much if any dilution flow that won't be from the refuse area footprint. That's why we couldn't assume there would be dilution flow from a wet weather even that is also causing the treatment ponds to discharge. These streams while very small and may not have significant aquatic life, are still classified as warm water habitat. WQ standards must still be applied.

We addressed the WQ issue for TDS by putting a condition in the NPDES limiting the exposure of aquatic life to the discharge by requiring the discharge not occur for more than one 48 hr. period in one 7 day period. This would be a once a week discharge period, i.e. not 8 discharge events of 6 hrs. each spread out over the week. You could have for example, three 8 hr. discharge events in the 48 hr. period if for some reason that was necessary or more convenient. There is no limit to the volume of discharge during this 48 hr. period. But once you begin to discharge, the discharge must not occur after 48 hrs. has passed ( unless the precipitation event specified in the permit happens) and the next discharge not happen until 120 hrs. has passed. This is so the aquatic life is only exposed to the TDS in one 48 hr. period only once per 7 day period.

As noted above, I adjusted the language in the permit to reflect the above explanation.

This permit may be further reviewed by our Columbus office, but I've kept Eric fully informed of the language and permit's requirements. USEPA may also have comments during the PN period.

If your company has any comments, we'll consider them during the PN period of 30 days. The permit will probably not actually get PN'd for a day or so, so if you see any typos, or something that is obviously a mistake or confusing, let me know in the next day or two and I may be able to change it.

Call or email if you have any questions.

Bruce E. Goff, P.E.  
Permit Supervisor/Division of Surface Water  
Ohio EPA/Southeast District Office  
740-380-5238

**From:** Scott, Crellin [mailto:cscott@coalsource.com]  
**Sent:** Thursday, October 11, 2012 5:11 PM

**To:** Goff, Bruce  
**Cc:** Nagel, Jon  
**Subject:** RE: Draft Bennoc NPDES P.

Bruce,  
Thank you for your note, I apologize for not getting directly back to you. Yes, we do have outside counsel helping us with this permit, but we see no reason to prevent the agency from going forward with Public Notice. Please proceed as needed.

Thank you for your assistance,

**Crellin**

**From:** Goff, Bruce [<mailto:bruce.goff@epa.state.oh.us>]  
**Sent:** Thursday, October 11, 2012 2:28 PM  
**To:** Scott, Crellin  
**Cc:** Nagel, Jon  
**Subject:** RE: Draft Bennoc NPDES P.

Scott:

RE: your email below

Scott:

What is the status of getting any comments to us? I was thinking your company needed to start using this new refuse disposal area this fall and I wanted to get the permit public noticed to meet your schedule.

I think we are going to proceed with the PN, but I will have to check with one of our attorneys on this before PN'ing since I did receive word from one of our agency attorneys that there had been an inquiry by an attorney representing your company on this matter. I'm not sure what the status of that inquiry is. You will still have an opportunity to comment during the PN period. We are thinking USEPA will be reviewing the PN'd permit and may have some comments and concerns. So we may want to get that process started as soon as we can because that could take months based on past experiences dealing with USEPA.

Bruce

**From:** Scott, Crellin [<mailto:cscott@coalsource.com>]  
**Sent:** Saturday, September 29, 2012 9:34 AM  
**To:** Goff, Bruce  
**Cc:** Nagel, Jon  
**Subject:** RE: Draft Bennoc NPDES P.

Bruce,

Thank you for the speedy review of the recent application material submitted to you and for the quick write-up of the "Preliminary Draft" permit. I know you would like us to get back to you on Monday, so you can public notice the "Draft", however we would appreciate additional time to review the preliminary permit. Would it be possible to have until next Friday to review ? I sincerely appreciate any additional time you can give us.  
Best Wishes,

**Crellin**

**From:** Goff, Bruce [mailto:bruce.goff@epa.state.oh.us]  
**Sent:** Friday, September 28, 2012 4:54 PM  
**To:** Nagel, Jon; Scott, Crellin  
**Cc:** Nygaard, Eric  
**Subject:** Draft Bennoc NPDES P.

Jon and Crellin:

Attached is the draft of the NPDES P.

Please submit any comments before end of the day Monday. I'd like to try to get this public noticed early next week.

Bruce E. Goff, P.E.  
Permit Supervisor/Division of Surface Water  
Ohio EPA/Southeast District Office  
740-380-5238

[attachment "AEC Bennoc Draft.pdf" deleted by Janet Pellegrini/R5/USEPA/US]  
----- Message from "Goff, Bruce" <bruce.goff@epa.state.oh.us> on Thu, 27 Sep 2012 17:28:32 +0000 -----  
**To:** "Nagel, Jon" <jnagel@coalsource.com>, Crellin Scott <cscott@coalsource.com>  
**cc:** "Nygaard, Eric" <eric.nygaard@epa.state.oh.us>, "Campbell, Tim" <Tim.Campbell@epa.state.oh.us>  
**Subject:** Bennoc Coarse Coal Refuse Area NPDES OIL00159

:  
Jon and Crellin:

We have completed our review of your response to our comments on the NPDES application for this project. Your responses were detailed and well organized and well documented.

We will be proceeding with the drafting and public noticing of the NPDES permit, unless you respond to me that you will be unable to meet the permit's requirements that I will be listing below.

If you will be unable to meet the requirements, we may have to consider proposing to deny the issuance of the NPDES P.

Below are the draft NPDES Requirements ( other than the usual coal related technology based effluent limitations and OEPA usual requirements for coal NPDES permits):

We will be unable to not apply our water quality standards to the initial small unnamed tributaries. By rule, these have default classification of warm water habitat. Even if we were to agree to reclassify them as limited resource water based on your submitted information, we cannot reclassify a stream without going through rulemaking which would take months and be subject to USEPA and public comments, etc. Even is reclassified as LRM, the acute standards, e.g. the acute sulfate standard would still apply.

We propose to protect water quality in the receiving water bodies by:

- To address both TDS and sulfate acute toxicity, the permit will include an acute sulfate (daily maximum limit based on a grab sample) limit of 2435 ppm. The attached spreadsheet shows how this was determined. We applied the formulas USEPA has recommended for chloride and sulfate WQS. We assumed no dilution in the unnamed tributaries during discharge, i.e. the flow in the unnamed tributaries will consist of 100% pond effluent. Note that these are the initial tributaries the ponds discharge into. We used the effluent data for hardness and chloride listed on page 3 of Dr. Walker's September 14 Report. An effluent hardness of 500 ( maximum allowed by the formula) was used. Based on the projected chloride effluent quality, you would not have any problem meeting the calculated effluent limitation and we would probably have no limit in the permit and probably no monitoring,.
- Our WQS's has a standard of 1500 for TDS, 30 day average, which must still be met. The projected effluent quality shows that your pond discharges would be significantly higher than this value. We will propose that the WQS for TDS does not apply if you can control the discharges so they only occur for less than 48 hours **and** not more than once per week. If you are able to meet this criteria, we believe that any aquatic life in the tributaries exposed to the high TDS during discharge will be limited and there will be no adverse chronic effect. The fact remains, however, that pools of effluent will remain. Hopefully these pools of high TDS water will be "diluted" by groundwater seepage from springs that you have observed. If OEPA gets an opportunity, we will schedule a survey of the small tributaries after you have been in operation to see if there are any observed impacts. This survey information will be useful if we have to consider future discharges like yours that have high sulfate and TDS.

It will be very important for AEC to minimize the exposure of rain and snowmelt to exposed refuse during the life of the disposal area. Last month I sent to Crellin this reference URL <http://www.icci.org/06final/dev05-8chugh.pdf> to a document that included some discussion of BMPs for refuse disposal area. Attached are some pages from that document that pertain to refuse disposal areas.

You will have to modify the ponds to have a "controlled discharge" to limit any discharge to less than 48 hours-once a week. The current design isn't a "controlled discharge".

What flows into the pond will flow out shortly thereafter, e.g. if a wet weather period causing runoff/drainage into the pond occurs for more than 48 hours, the pond would discharge > 48 hours. This of course is assuming the pond has no seepage, etc. You will have to modify the ponds to either be pumped out, or provide a siphon type discharge structure, or start a siphon by pumping, or have an outlet pipe at a lower elevation than the principal spillway with a manual valve. See attached drawings showing examples. The pond's stored water would be drained out in a period of less than 48 hrs and there would be storage capacity available to catch the next wet weather ( and snowmelt) event. The pump and/or siphon would have to have capacity to drain the stored volume out in < 48 hrs. There will be no limitation on the discharge rate, although we'd like to see it controlled to some extent to minimize impacts due to pH, osmotic and temperature shocks to downstream aquatic life.

To make sure the ponds only discharge only once a week, the permit will require daily flow and precipitation monitoring reporting. Considering the pond design, location, short term use and the fact the discharge would be controlled, we would accept a daily visual estimate of flow volume for the 24 hr. reporting period. This would mean that someone should normally inspect the outfalls once a day, but if it is obvious there would be no discharge because the pond has been recently dewatered, there is storage and there has been no rain event or snowmelt, we would accept an estimate of no discharge without an actual daily inspection of the outfall and/or principal spillway.

Please evaluate the storage pond capacity needs and pump dewatering or siphon design that will accomplish this. Of course, any design will have to meet the pollutant concentration effluent limits in the permit.

We won't require a design that meets this criteria in unusual rainfall events or a series of unusual events or an extended wet weather period. I would propose that the design assume a one inch rainfall one time a week. If you want to propose something different, please get back to me very soon with a good justification.

As indicated in our comments, a PTI will have to be submitted for any modifications to the two ponds. You have already indicated the ponds will be enlarged. Please submit a PTI application after the NPDES Permit goes final. This is a requirement of our antidegradation rule if a PTI application is not submitted with an NPDES application. We can still review preliminary designs and "pre-application" submittals if you want to send them to use before the NPDES Permit goes final.

If the bottom area of the ponds will be enlarged during the modification of the ponds, please include a specification and details showing a good compaction using a good clay type soil so seepage will be minimized. If the pond's have seepage, the criteria to only discharge < 48 hrs, once a week would not be met.

The NPDES permit will have a condition that the discharges are only authorized if the two treatment ponds are designed and operated according to an approved PTI.

If you would like to meet or schedule a conference call to discuss any of the above,

please let me know.

I will proceed with drafting of the NPDES permit and have it public noticed. I will send you a copy of the draft permit once it is finished. I should have it drafted before the end of the day Friday. It would be PN'd next week and could be iss'd final the first part of November. Note that this PN'd permit will more than likely be reviewed by USEPA. We would have to address any comments they have. We have discussed with USEPA staff the concept of using a controlled type discharge for storm water discharges like this from mining to address the sulfate and TDS issues and they have been generally been agreeable to this approach, but this would be the first time we have put anything like this in an coal mining NPDES permit. So they may have comments and concerns.

Feel free to call or email me especially if your company has concerns or disagree with any of the above,

Bruce E. Goff, P.E.  
Permit Supervisor/Division of Surface Water  
Ohio EPA/Southeast District Office  
740-380-5238

**From:** Nagel, Jon [<mailto:jnagel@coalsource.com>]  
**Sent:** Monday, September 17, 2012 12:48 PM  
**To:** Goff, Bruce  
**Subject:** RE: Bennoc Coarse Coal Refuse Area NPDES OIL00159 Comments

Good, I am glad you received it. I wasn't sure about the transmission of the PDF. We are currently moving to our new building and I am just getting set back up. Oh, I was under the impression that he was scheduled to be off for a longer than that. Well I am glad he is back.

Thanks again. We look forward for your review of our packet.

Sincerely,  
Jon

**From:** Goff, Bruce [<mailto:bruce.goff@epa.state.oh.us>]  
**Sent:** Monday, September 17, 2012 12:45 PM  
**To:** Nagel, Jon  
**Subject:** RE: Bennoc Coarse Coal Refuse Area NPDES OIL00159 Comments

Yes, rec'd it. Eric was on leave for a few weeks, but is now back at work. Is that what you were referring to regarding his "absence"? I forwarded your email up to him.

Bruce

**From:** Nagel, Jon [<mailto:jnagel@coalsource.com>]  
**Sent:** Monday, September 17, 2012 12:43 PM  
**To:** Goff, Bruce  
**Subject:** RE: Bennoc Coarse Coal Refuse Area NPDES OIL00159 Comments



Bruce,

Just wanted to make sure you received our packet. The hard copies were sent out this morning.

On another note, should we expect any changes in any of our ongoing projects or anything other changes in regards to Eric's absence?

Thank you,  
Jon

**From:** Goff, Bruce [<mailto:bruce.goff@epa.state.oh.us>]  
**Sent:** Monday, September 17, 2012 9:59 AM  
**To:** Nagel, Jon  
**Subject:** RE: Bennoc Coarse Coal Refuse Area NPDES OIL00159 Comments

Jon:

Thanks. We'll review this so and hopefully we can take action on the NPDES application.

Bruce

**From:** Nagel, Jon [<mailto:jnagel@coalsource.com>]  
**Sent:** Saturday, September 15, 2012 9:51 AM  
**To:** Goff, Bruce  
**Cc:** Van Bever, Chris; Witt, Jason; Turner, James; Scott, Crellin  
**Subject:** Bennoc Coarse Coal Refuse Area NPDES OIL00159 Comments

Mr. Goff,

Please find the attached document containing our responses to your and Mr. Nygaard's comments, and supporting information. This response packet will contain 2 copies of each of its enclosures, and will be mailed to your office.

We look forward to your review and decision on this permit.

Thank you for your time and cooperation.

Sincerely,

Jon M. Nagel  
*Coordinator of Environmental Compliance*  
**Murray Energy Corporation**  
46226 National Road  
St. Clairsville, OH 43950

Cell - (740) 213-1688  
Office - (740) 338-3100

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